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CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER	
HOANG, SON T	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/514,423	NOMURA, TAKASHI	
	Examiner	Art Unit	
	SON T. HOANG	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7-12,14-17,20 and 21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-12,14-17,20 and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *April 27, 2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This communication is in response to the amendment filed on April 27, 2009 and the supplemental amendment filed on May 26, 2009.

The specification is amended.

Claims 5-6, **13**, **18-19**, and **22-31** are canceled.

Claims 1-4, **7-12**, **14-17**, and **20-21** are amended.

Claims 1-4, **7-12**, **14-17**, and **20-21** are pending.

Response to Argument

2. Objection to the instant application's priority document is withdrawn.

3. Objection to the Information Disclosure Statement is withdrawn.

4. 35 U.S.C. 101 rejections of the pending claims are withdrawn in view of Applicant's amendment.

5. Applicant's arguments with respect to the 35 U.S.C. 102(a) and 35 U.S.C. 103(a) rejections of the pending claims have been fully considered but are moot in view of the new ground of rejections presented hereon.

First, Applicant argues towards **independent claim 1** regarding the fact that Nakano does not teach or disclose "*as the map-related information provided in units of the individual divisions, at least one type of map-related information available at all levels and another type of map-related information available at, at least, one level are provided separately from each other*".

The Examiner respectfully disagrees with the above remark. Accordingly, Nakano teaches as the map-related information provided in units of the individual divisions, at least one type of map-related information available at all levels (*As shown in Figure 7, the background data is composed of a basic background table and a detailed background table. As can be clearly seen from Figure 8(a), the basic background table is a group of graphic data which is used as the base when displaying the background of the map, which shows a river, a railroad, and a green belt, for example*, [0078]) and another type of map-related information available at, at least, one level are provided separately from each other (*as clearly shown in Figure 23(a), the basic character/symbol table contains character strings and map symbols which schematically show the map the unit U covers, which may include the names of rivers and roads, map symbols, etc*, [0097]). Clearly, the basic images of river, railroad belong to one type of data, and the names or symbols of these infrastructures belong to another type of data.

Dependent claims 2-4, **7**, and **20-21** are also rejected for the similar reasons presented above.

Second, Applicant argues towards **independent claim 8** regarding the fact that Nakano does not teach or disclose utilization of a connecting point based on geographically matching positions within two divisions that belong to levels different from one another.

The Examiner respectfully disagrees with the above remarks. Accordingly, Nakano teaches utilization of a connecting point based on geographically matching positions within two divisions that belong to levels different from one another (*a higher-level cartographic file CF generally has lower coordinate resolution than a map expressed by a lower-level cartographic file CF. Therefore, as shown in FIG. 40, between lower-level and high-level cartographic files CF, two nodes N having different coordinates may be represented by the same coordinates because of a rounding error produced at the higher level*, [0180]).

Third, Applicant argues towards **independent claim 8** regarding the fact that Nakano does not teach or disclose attaching two-dimensional coordinate values for the connecting point at a level at which the map is rendered in greater detail to the coordinate values of the connecting point at the given level.

The Examiner respectfully disagrees with the above remarks. Accordingly, Nakano teaches attaching two-dimensional coordinate values for the connecting point at a level at which the map is rendered in greater detail to the coordinate values of the connecting point at the given level (*even if a higher-level unit U has rounding errors in coordinates, the node records NR are recorded in the ascending orders of coordinates on the basis of the normalized longitude/latitude coordinates which do not contain the rounding errors. Accordingly, when the data processing portion 13 traces from a lower-level node N to a node N which is contained also in the parent unit PN and represents the same position, it can uniquely specify the corresponding node N in the parent unit PU according to the*

order of the node records NR, from among the nodes N which are recorded in the lower-level unit U and also in the parent unit U and which will be located at the same coordinates because of the rounding error on the higher level, [0181]).

Dependent claims 9-12 are also rejected for the similar reasons presented above.

Fourth, Applicant argues towards **independent claim 14** regarding the fact that Nakano does not teach or disclose separating the map-related information into different types to be individually managed by the setting of a predetermined upper limit to the size thereof.

The Examiner concurs with the above remarks. However, it is noted that Rutledge (*Pat. No. US 6,650,998, filed on July 28, 1997; hereinafter Rutledge*) teaches the above argued limitation. Accordingly, Rutledge discloses map-related information having the highest priority among the different types of map-related information is managed by setting a predetermined upper limit to the size thereof; and the processing unit executes processing of the map data by using the map-related information provided in units of individual divisions where the map-related information having the highest priority among the different types of map-related information is managed by setting the predetermined upper limit to the size thereof (*overlay 220, corresponding to parks, may comprise many park overlays, with parks in each overlay categorized on the basis of size. For example, large state parks may be stored in one overlay, and smaller city and neighborhood parks may be stored in another overlay. This overlay*

categorization allows the user to view each retrieved map with a predetermined degree of resolution. As more and more layers are combined, more detail appears on the map being displayed, [Column 5, Lines 8-13]).

It would have been obvious to an ordinary person skilled in the art at the time of the invention was made to incorporate the teachings of Rutledge with the teachings of Nakano for the purpose of utilizing a map-based directory system so that queries and information records are qualified by temporal and geographical references ([Abstract] of Rutledge).

Dependent claims 14-17 are also rejected for the similar reasons presented above.

6. The Examiner contends that all limitations as recited in the claims have been addressed in this instant Office action. Hence, Applicant's arguments do not distinguish over the claimed invention over the prior arts of record.

For the above reasons, the Examiner believed that rejections of this instant Office action are proper.

Priority / Filing Date

7. The Applicant's claim for priority of Japanese Applications No. JP 2002-143111 and No. JP 2002-143112 (both filed on May 17, 2002) is acknowledged. The Examiner takes the foreign priority of both '111 and '112 into consideration.

Information Disclosure Statement

8. As required by **M.P.E.P. 609(C)**, the Applicant's submission of the Information Disclosure Statement dated April 27 2009 is acknowledged by the Examiner and the cited references have been considered in the examination of the claims now pending. As required by **M.P.E.P 609 C(2)**, a copy of the PTOL-1449 initialed and dated by the Examiner is attached to the instant Office action.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. **Claims 1-4**, **7-10**, **14-17**, and **20-21** are rejected under 35 U.S.C. 103(a) as being obvious over Nakano et al. (*Pub. No. EP 1134674, published on September 19, 2001; hereinafter Nakano*) in view of Rutledge et al. (*Pat. No. US 6,650,998, filed on July 28, 1997; hereinafter Rutledge*).

Regarding **claim 1**, Nakano clearly shows and discloses a map data processing apparatus (F*igure 1*), comprising:

a recording medium drive unit that receives a recording medium in which are recorded map data including a structure having the map-related information divided into units of a plurality of divisions into which the map is divided (*The first storage device 19 is typically composed of a storage device which is capable of rewriting data, such as a hard disk drive or a flash memory. The first database 11 1 is stored in the first storage device 19.The first database 11 1 is a group of data which contains at least one cartographic file CF which allows this terminal device 1 to function as a navigation system*, [0043]); and a structure having management information for the map-related information divided into units of the divisions (*Figure 7 shows the data structure of the unit header which contains management information about the unit data in the cartographic file CF. The unit header at least includes the unit ID, the version code, and the data sizes of the eight kinds of tables contained in the unit data. The unit ID is an identification number which uniquely specifies the unit U represented by the cartographic file CF*, [0133]), wherein:

an update data acquisition unit that obtains update data for the map-related information provided in units of the individual divisions (*When the user of the terminal device 1 wants to add a new cartographic file CF to the first storage device 19 or update an old cartographic file CF to a newer version, the user operates the input device 11 to activate the map request/receive function. Next, the user operates the input device 11 according to a menu screen displayed on the display of the output device 110 to enter the area and the level (hierarchical level) of the desired map*, [0188]); and

a processing unit that updates the map-related information recorded in the recording medium in units of the individual divisions by using the update data obtained by the update data acquisition unit and the management information, and executes processing of the map data based upon the map-related information recorded in the recoding medium, the update data obtained by the update data acquisition unit and the management information (*When the data processing portion 13 decides that the version code extracted from the master data MD is newer, it moves to the step S906 to extract only the data portion of the master data MD and stores the newer-version cartographic file CF in the first storage device 19. The old cartographic file CF in the first database 111 has thus been updated to a newer version*, [0215]), wherein:

as the map-related information provided in units of the individual divisions, at least one type of map-related information available at all levels (*As shown in Figure 7, the background data is composed of a basic background table and a detailed background table. As can be clearly seen from Figure 8(a), the basic background table is a group of graphic data which is used as the base when displaying the background of the map, which shows a river, a railroad, and a green belt, for example*, [0078]) and another type of map-related information available at, at least, one level are provided separately from each other (*as clearly shown in Figure 23(a), the basic character/symbol table contains character strings and map symbols which schematically show the map the unit U covers, which may include the names of rivers and roads, map symbols, etc*, [0097]); and

the processing unit executes processing of the map data by using the map-related information in units of the individual divisions provided separately with the one type of map-related information and the other type of map-related information (*Figure 58*).

Rutledge then discloses:

a plurality of levels are defined, each in correspondence to one of a plurality of different scaling factors at which the map is rendered (*Figure 3*); and

a plurality of sets of the map-related information are provided in correspondence to the plurality of levels (*zoom layer 305 includes a tile 300 that represents a portion of a general map of a country. Such a map, when displayed on computer terminal 110, illustrates gross details, such as state boundaries. Zoom layer 315 includes a plurality of tiles 310, each of which represent a map relating to one or more states corresponding to the area represented by tile 300. Each tile 310 when displayed on computer terminal 110, illustrates more details of areas contained in a state*, [Column 4, Lines 23-32]).

It would have been obvious to an ordinary person skilled in the art at the time of the invention was made to incorporate the teachings of Rutledge with the teachings of Nakano for the purpose of utilizing a map-based directory system so that queries and information records are qualified by temporal and geographical references ([Abstract] of Rutledge).

Regarding **claim 2**, Nakano further discloses:

the map is divided into a plurality of first division units, the first division units are each divided into a plurality of second division units, a number of the second division units is equal among the individual first division units, and the divisions into which the map is divided each corresponding to one of the second division units (*Figure 2 shows a plurality of kinds of maps on different scales are prepared. The largest scale is referred to as level 0, the second largest scale as level "1", the third largest scale as level "2", and the smallest scale as level "3". As is thus clear, the cartographic data is composed of the four levels, levels "0" to "3", the level "0" being the largest scale. Further, a map at a higher level is referred to as a higher-level map and one at a lower level is referred to as a lower-level map. A map at a higher level shows a larger area in less detail. On the other hand, a map at a lower level shows a smaller area in more detail. Maps at each level are sectioned at equal intervals in the longitude and latitude directions*, [0051]); and

the management information contains a set of management information related to the plurality of second division units, provided in correspondence to each of the first division units (*Figure 7 shows the data structure of the unit header which contains management information about the unit data in the cartographic file CF. The unit header at least includes the unit ID, the version code, and the data sizes of the eight kinds of tables contained in the unit data.*

The unit ID is an identification number which uniquely specifies the unit U represented by the cartographic file CF, [0133]).

Regarding **claim 3**, Nakano further discloses the management information further contains management information related to the plurality of first division units (*Figure 7 shows the data structure of the unit header which contains management information about the unit data in the cartographic file CF. The unit header at least includes the unit ID, the version code, and the data sizes of the eight kinds of tables contained in the unit data. The unit ID is an identification number which uniquely specifies the unit U represented by the cartographic file CF*, [0133]).

Regarding **claim 4**, Nakano further discloses:

the map is divided into a plurality of first division units at each level, the first division units are each divided into a plurality of second division units, the number of second division units is equal among the individual first division units, and the divisions into which the map is divided each corresponding to one of the second division units (*The largest scale is referred to as level 0, the second largest scale as level "1", the third largest scale as level "2", and the smallest scale as level "3". As is thus clear, the cartographic data is composed of the four levels, levels "0" to "3", the level "0" being the largest scale. Maps at each level are sectioned at equal intervals in the longitude and latitude directions*, [0051]);

the management information contains a set of management information related to the plurality of first division units provided in correspondence to each of

levels, and also contains a set of management information related to the plurality of second division units provided in correspondence to each of the first division units (*Figure 7 shows the data structure of the unit header which contains management information about the unit data in the cartographic file CF. The unit header at least includes the unit ID, the version code, and the data sizes of the eight kinds of tables contained in the unit data. The unit ID is an identification number which uniquely specifies the unit U represented by the cartographic file CF*, [0133]).

Regarding **claim 7**, Nakano further discloses:

the one type of map-related information is used to display the map at a display device (*Figure 58(a) shows the terminal device 102 can generate a relatively rough map $\beta_{0,0}$ by superimposing the basic background data table $BBD_{0,0}$, the basic character/symbol data table $BCD_{0,0}$, and the highway network data table $MND_{0,0}$. It can also generate a more detailed map $\beta_{0,0}$ as shown in Figure 58(b) by superimposing the detailed background data table $DBD_{0,0}$, the detailed character/symbol data table $DCD_{0,0}$, and the street network data table $SND_{0,0}$ on the rough map $\beta_{0,0}$ shown in Fig.58(a)*, [0256]); and

the other type of map-related information contains information used in route search (*Figure 33 is a diagram showing the concept of the route search operation. The search is expanded from both of the starting point SP and the destination point DP to obtain the shortest route. The route search uses*

cartographic files CF at a plurality of levels from a lower level to a higher level, [0139]).

Regarding **claim 8**, Nakano clearly shows and discloses a map data processing apparatus (*Figure 1*), comprising:

a recording medium drive unit that receives a recording medium in which are recorded map data including a structure having the map-related information divided into units of a plurality of divisions into which the map is divided (*The first storage device 19 is typically composed of a storage device which is capable of rewriting data, such as a hard disk drive or a flash memory. The first database 11 1 is stored in the first storage device 19.The first database 11 1 is a group of data which contains at least one cartographic file CF which allows this terminal device 1 to function as a navigation system*, [0043]); and a structure having management information for the map-related information divided into units of the divisions (*Figure 7 shows the data structure of the unit header which contains management information about the unit data in the cartographic file CF. The unit header at least includes the unit ID, the version code, and the data sizes of the eight kinds of tables contained in the unit data. The unit ID is an identification number which uniquely specifies the unit U represented by the cartographic file CF*, [0133]), wherein:

an update data acquisition unit that obtains update data for the map-related information provided in units of the individual divisions (*When the user of the terminal device 1 wants to add a new cartographic file CF to the first storage*

device 19 or update an old cartographic file CF to a newer version, the user operates the input device 11 to activate the map request/receive function. Next, the user operates the input device 11 according to a menu screen displayed on the display of the output device 110 to enter the area and the level (hierarchical level) of the desired map, [0188]); and

a processing unit that updates the map-related information recorded in the recording medium in units of the individual divisions by using the update data obtained by the update data acquisition unit and the management information, and executes processing of the map data based upon the map-related information recorded in the recoding medium, the update data obtained by the update data acquisition unit and the management information (*When the data processing portion 13 decides that the version code extracted from the master data MD is newer, it moves to the step S906 to extract only the data portion of the master data MD and stores the newer-version cartographic file CF in the first storage device 19. The old cartographic file CF in the first database 111 has thus been updated to a newer version*, [0215]), wherein:

the map is divided into a plurality of division at each level, and each of the plurality of sets of map-related information, corresponding to a given level, is divided in units of the individual divisions into which the map is divided (*it is assumed in Figure 2 that maps on four scaling levels are prepared. In the description below, the largest scale is referred to as level 0, the second largest scale as level "1", the third largest scale as level "2", and the smallest scale as*

level "3". As is thus clear, the cartographic data is composed of the four levels, levels "0" to "3", the level "0" being the largest scale, [0051]);

a connecting point at which the map-related information corresponding to one of two divisions is correlated to the map-related information corresponding to the other division is present at a geographically matching position within the two divisions, the two divisions respectively belonging to levels different from each other (*a higher-level cartographic file CF generally has lower coordinate resolution than a map expressed by a lower-level cartographic file CF. Therefore, as shown in FIG. 40, between lower-level and high-level cartographic files CF, two nodes N having different coordinates may be represented by the same coordinates because of a rounding error produced at the higher level*, [0180]); and

sets of information related to the connecting point contain common two-dimensional coordinate values indicating the position of the connecting point within the map in the map-related information corresponding to the two divisions (*Figures 40-41*);

two dimensional coordinate values of the connecting point at a level at which the map is rendered in greater detail are attached to two-dimensional coordinate values of the connecting point at a given level; and the processing unit executes processing of the map data by using the two dimensional coordinate values of the connecting point at a given level to which the two-dimensional coordinate values of the connecting point at a level at which the map

is rendered in greater detail is attached (*even if a higher-level unit U has rounding errors in coordinates, the node records NR are recorded in the ascending orders of coordinates on the basis of the normalized longitude/latitude coordinates which do not contain the rounding errors. Accordingly, when the data processing portion 13 traces from a lower-level node N to a node N which is contained also in the parent unit PN and represents the same position, it can uniquely specify the corresponding node N in the parent unit PU according to the order of the node records NR, from among the nodes N which are recorded in the lower-level unit U and also in the parent unit U and which will be located at the same coordinates because of the rounding error on the higher level*, [0181]).

Rutledge then discloses:

a plurality of levels are defined, each in correspondence to one of a plurality of different scaling factors at which the map is rendered (*Figure 3*); and

a plurality of sets of the map-related information are provided in correspondence to the plurality of levels (*zoom layer 305 includes a tile 300 that represents a portion of a general map of a country. Such a map, when displayed on computer terminal 110, illustrates gross details, such as state boundaries. Zoom layer 315 includes a plurality of tiles 310, each of which represent a map relating to one or more states corresponding to the area represented by tile 300. Each tile 310 when displayed on computer terminal 110, illustrates more details of areas contained in a state*, [Column 4, Lines 23-32]).

It would have been obvious to an ordinary person skilled in the art at the time of the invention was made to incorporate the teachings of Rutledge with the teachings of Nakano for the purpose of utilizing a map-based directory system so that queries and information records are qualified by temporal and geographical references ([Abstract] of Rutledge).

It would have been obvious to an ordinary person skilled in the art at the time of the invention was made to incorporate the teachings of Rutledge with the teachings of Nakano for the purpose of utilizing a map-based directory system so that queries and information records are qualified by temporal and geographical references ([Abstract] of Rutledge).

Regarding **claim 9**, Nakano further discloses the two-dimensional coordinate values are values corresponding to latitudinal and longitudinal values (*The world map of Figure 3 is sectioned at intervals of 5 degrees 20 minutes in the latitude direction on the basis of latitude 0 degree. This world map is also sectioned at equal intervals of about 8 degrees in the longitude direction on the basis of longitude 0 degree*, [0052]).

Regarding **claim 10**, Nakano further discloses the information related to the connecting point contains a parameter other than the two-dimensional coordinate values of the connecting point in addition to the two-dimensional coordinate values (*even if a higher-level unit U has rounding errors in coordinates, the node records NR are recorded in the ascending orders of coordinates on the basis of the normalized longitude/latitude coordinates which*

do not contain the rounding errors. Accordingly, when the data processing portion 13 traces from a lower-level node N to a node N which is contained also in the parent unit PN and represents the same position, it can uniquely specify the corresponding node N in the parent unit PU according to the order of the node records NR, from among the nodes N which are recorded in the lower-level unit U and also in the parent unit U and which will be located at the same coordinates because of the rounding error on the higher level, [0181]).

Regarding **claim 14**, Nakano clearly shows and discloses a map data processing apparatus (*Figure 1*), comprising:

a recording medium drive unit that receives a recording medium in which are recorded map data including a structure having the map-related information divided into units of a plurality of divisions into which the map is divided (*The first storage device 19 is typically composed of a storage device which is capable of rewriting data, such as a hard disk drive or a flash memory. The first database 11 1 is stored in the first storage device 19.The first database 11 1 is a group of data which contains at least one cartographic file CF which allows this terminal device 1 to function as a navigation system*, [0043]); and a structure having management information for the map-related information divided into units of the divisions (*Figure 7 shows the data structure of the unit header which contains management information about the unit data in the cartographic file CF. The unit header at least includes the unit ID, the version code, and the data sizes of the eight kinds of tables contained in the unit data. The unit ID is an identification*

number which uniquely specifies the unit U represented by the cartographic file CF, [0133]), wherein:

an update data acquisition unit that obtains update data for the map-related information provided in units of the individual divisions (*When the user of the terminal device 1 wants to add a new cartographic file CF to the first storage device 19 or update an old cartographic file CF to a newer version, the user operates the input device 11 to activate the map request/receive function. Next, the user operates the input device 11 according to a menu screen displayed on the display of the output device 110 to enter the area and the level (hierarchical level) of the desired map*, [0188]); and

a processing unit that updates the map-related information recorded in the recording medium in units of the individual divisions by using the update data obtained by the update data acquisition unit and the management information, and executes processing of the map data based upon the map-related information recorded in the recoding medium, the update data obtained by the update data acquisition unit and the management information (*When the data processing portion 13 decides that the version code extracted from the master data MD is newer, it moves to the step S906 to extract only the data portion of the master data MD and stores the newer-version cartographic file CF in the first storage device 19. The old cartographic file CF in the first database 111 has thus been updated to a newer version*, [0215]), wherein:

the map-related information provided in units of individual divisions is separated into different types of map-related information to be individually managed (*As shown in Figure 7, the background data is composed of a basic background table and a detailed background table. As can be clearly seen from Figure 8(a), the basic background table is a group of graphic data which is used as the base when displaying the background of the map, which shows a river, a railroad, and a green belt, for example*, [0078]. *As clearly shown in Figure 23(a), the basic character/symbol table contains character strings and map symbols which schematically show the map the unit U covers, which may include the names of rivers and roads, map symbols, etc*, [0097]).

Nakano does not disclose map-related information having the highest priority among the different types of map-related information is managed by setting a predetermined upper limit to the size thereof; and the processing unit executes processing of the map data by using the map-related information provided in units of individual divisions where the map-related information having the highest priority among the different types of map-related information is managed by setting the predetermined upper limit to the size thereof.

However, Rutledge discloses map-related information having the highest priority among the different types of map-related information is managed by setting a predetermined upper limit to the size thereof; and the processing unit executes processing of the map data by using the map-related information provided in units of individual divisions where the map-related information having

the highest priority among the different types of map-related information is managed by setting the predetermined upper limit to the size thereof (*overlay 220, corresponding to parks, may comprise many park overlays, with parks in each overlay categorized on the basis of size. For example, large state parks may be stored in one overlay, and smaller city and neighborhood parks may be stored in another overlay. This overlay categorization allows the user to view each retrieved map with a predetermined degree of resolution. As more and more layers are combined, more detail appears on the map being displayed*, [Column 5, Lines 8-13]).

It would have been obvious to an ordinary person skilled in the art at the time of the invention was made to incorporate the teachings of Rutledge with the teachings of Nakano for the purpose of utilizing a map-based directory system so that queries and information records are qualified by temporal and geographical references ([Abstract] of Rutledge).

Regarding **claim 15**, Rutledge further discloses if the size of the map-related information having the highest priority exceeds the predetermined upper limit after update, at least map-related information corresponding to an excess beyond the predetermined upper limit to the size, which results from the update, is managed as map-related information with lower priority relative to the highest priority (*overlay 220, corresponding to parks, may comprise many park overlays, with parks in each overlay categorized on the basis of size. For example, large state parks may be stored in one overlay, and smaller city and neighborhood*

parks may be stored in another overlay. This overlay categorization allows the user to view each retrieved map with a predetermined degree of resolution. As more and more layers are combined, more detail appears on the map being displayed, [Column 5, Lines 8-13]).

Regarding **claim 16**, Rutledge further discloses the map-related information with the highest priority includes at least information used to display the map at a display device (*overlay 220, corresponding to parks, may comprise many park overlays, with parks in each overlay categorized on the basis of size. For example, large state parks may be stored in one overlay, and smaller city and neighborhood parks may be stored in another overlay. This overlay categorization allows the user to view each retrieved map with a predetermined degree of resolution. As more and more layers are combined, more detail appears on the map being displayed*, [Column 5, Lines 8-13]).

Regarding **claim 17**, Rutledge further discloses:

the map-related information with the highest priority includes at least information used to display the map at a display device; and the map-related information with the lower priority relative to the highest priority includes information that enables display of a more detailed map at the display device, compared to the map displayed by using the map-related information with the highest priority (*overlay 220, corresponding to parks, may comprise many park overlays, with parks in each overlay categorized on the basis of size. For example, large state parks may be stored in one overlay, and smaller city and*

neighborhood parks may be stored in another overlay. This overlay categorization allows the user to view each retrieved map with a predetermined degree of resolution. As more and more layers are combined, more detail appears on the map being displayed, [Column 5, Lines 8-13]).

Regarding **claim 20**, Nakano further discloses:

the map data are map display data; and the processing unit displays a map at a display unit by connecting the map data recorded in the recording medium with the update data obtained by the update data acquisition unit (*When the user of the terminal device 1 wants to add a new cartographic file CF to the first storage device 19 or* update *an old cartographic file CF to a newer version, the user operates the input device 11 to activate the map request/receive function. Next, the user operates the input device 11 according to a menu screen* displayed on the display *of the output device 110 to enter the area and the level (hierarchical level) of the desired map*, [0188]).

Regarding **claim 21**, Nakano further discloses:

the map data are route search data; and the processing unit executes route search processing by connecting the map data recorded in the recording medium with the update data obtained by the update data acquisition unit (*Through the input device, the user requests the terminal device 102 to scroll the map, to change the scale, etc. The output device is mainly composed of a display and a speaker. The display displays a map as required. The display also displays the results of route search or route guide carried out by the data processing*

portion 1023. The speaker provides the user, through speech, with the results of the route guide process performed by the data processing portion 1023, [0239]).

11. **Claims 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al. (*Pub. No. EP 1134674, published on September 19, 2001; hereinafter Nakano*), in view of Rutledge et al. (*Pat. No. US 6,650,998, filed on July 28, 1997; hereinafter Rutledge*), and further in view of Wilson et al. (*Pat. No. US 6,985,929, filed on August 31, 2000; hereinafter Wilson*).

Regarding **claim 11**, Nakano, as modified by Rutledge, does not disclose the parameter contains height information indicating a height of the connecting point.

However, Wilson discloses the parameter contains height information indicating a height of the connecting point (*Figure 19 illustrates the flow of operations in Web-based client applet 62 to generate 3D model of the "features" in the current AOI. The Web-based client applet 62 retrieves for point "features" information from a digital terrain elevation database at 100. Then at 102, the Web-based client applet 62 retrieves for area and line "features" two dimensional geospatial data, such as VPF, from server 52a. The Web-based client applet 62 regenerates the "relative" geometry of the two dimensional data at 104. Then, at 106 the three dimensional image is generated using the regenerated two dimensional data of 104 and the digital terrain elevation information of 100*, [Column 16, Lines 32-45]).

It would have been obvious to an ordinary person skilled in the art at the time of the invention was made to incorporate the teachings of Wilson with the teachings of Nakano, as modified by Rutledge, for the purpose of developing systems capable of immediate and efficient distribution and access to complex data having spatial and temporal information (i.e., geospatial data) ([Column 2, Line 67 → Column 3, Line 3] of Wilson).

Regarding **claim 12**, Wilson further discloses the parameter contains time information related to generation and update of the map-related information provided in units of the individual divisions (*A client initiates an update check. When a user logs onto the Gemstone server 52b (via Browser client 40), a request is sent to the server 52a via ORB-to-ORB communication (i.e., interface system 60a, 60b or 60 in case firewall 70 exists) to check for any update. A check, on whether client server 52b needs an update, from server's 52b client history log 122 is based on a time stamp and the state of the "feature" in terms of its location and "attributes"*, ([Column 19, Lines 14-21]).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Son T. Hoang whose telephone number is (571) 270-1752. The Examiner can normally be reached on Monday – Friday (7:00 AM – 4:00 PM).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Neveen Abel-Jalil can be reached on (571) 272-4074. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private

PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Son T Hoang/
Examiner, Art Unit 2165
August 4, 2009

/Neveen Abel-Jalil/
Supervisory Patent Examiner, Art Unit 2165